## CLAIMS

1. A heating apparatus, comprising:

5 a coil, and

a heating element, containing said coil, which generates heat by the action of magnetic flux from said coil to heat an image on a material to be heated,

wherein said heating element has a Curie temperature which is higher than a fixation temperature and is lower than a heat-resistant temperature of said heating apparatus and has a thickness, in an area outside an area corresponding to a predetermined size of the material to be heated, which is larger than a thickness in the area corresponding to the predetermined size of the material to be heated.

2. An apparatus according to Claim 1, wherein said heating element comprises a surface layer and a heat generation layer which has a thickness larger than a thickness of the surface layer when the temperature of said heating element is a fixation temperature.

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3. An apparatus according to Claim 2, wherein said heating element comprises a surface layer and a

heat generation layer which has a thickness, in the area outside the area corresponding to the predetermined size of the material to be heated, larger than a thickness of the surface layer when the temperature of said heating element is the Curie temperature.

- 4. An apparatus according to Claim 1, wherein said heating element is a hollow roller which is changed in an inner diameter so as to change the thickness of said heating element.
- 5. An apparatus according to Claim 1, wherein said apparatus further comprises power supply means

  15 for supplying power to said coil so that a temperature of said heating element in a conveyance area of the material to be heated is a predetermined fixation temperature.

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